Electrical Fire Safety

Office of the
State Fire Marshal
http://www.wsp.wa.gov/fire/firemars.htm

Electrical Fire Safety Considerations

When a house is under construction, inspectors visit to ensure the electrical system is in compliance with the Building Code and the National Electrical Code. Only licensed electricians are permitted to install electrical systems.

1

Electrical Distribution

- Know the location of the electrical panel in your home. The panel cover should have a label or tag with a date of the last inspection, if more than ten years, an inspection is advisable. You should know how to trip the main circuit breaker at the electrical panel to turn off all power to the house.
- Be sure the outlets and electrical system are adequate to prevent overloading. This is an important consideration when remodeling.
- Check to be sure all outlets and switches have cover plates so that no wiring is exposed.
- Arrange furnishings so that outlets are available without the use of extension cords.
- If an extension cord is necessary, be sure it is Underwriters Laboratory or Factory Mutual listed.
- Be sure extension cords are not frayed or cracked and are carrying their proper load.
- Check your power strips and power strip surge protectors for Consumer Product Safety Commission recalls. There are currently many in affect. *(link to CPSC)*
- Be sure light bulbs are the proper size for the outlet.

2

Electrical Appliances

- Inspect, clean and maintain all appliances regularly to make sure they operate properly. Follow the manufacturer's instructions for maintenance. If an appliance smells funny when in use, makes unusual sounds or the cord feels warm to touch, have it inspected and repaired by a qualified person. Keep appliances in a cool, dry place to prevent rusting.
- Keep space heaters, stoves, irons and other heat-producing appliances away from furniture, curtains, bedding or towels. Also, give televisions, stereos and computers plenty of air-space so they won't overheat.
- Unplug small appliances, such as can openers, when not in use.
- Be sure all electrical appliances are Underwriters Laboratory or Factory Mutual listed.

3

Electrical Shock Prevention

- Protect young children by putting plastic inserts in receptacle outlets not in use to keep them from putting anything into outlets.
- If you touch an electrical appliance, wall switch or electrical cord while you are wet or standing in water, it will increase the chance of electrical shock.
- A Ground Fault Interrupter (GFI) is a sensitive circuit breaker that is required by code. Have an electrician install GFI's on circuits in bathrooms or outdoors where water or moisture is present. Test GFI's by pushing the test button to be sure it disconnects the power to the outlet. Then push the reset button to restore power.

4

Electrical Emergencies

When an electrical emergency occurs, take the following action:

- If an appliance smells funny or operates improperly, unplug it if it can be done safely.
- If arcing, burning or smoking from an appliance occurs, turn off the power at the circuit breaker and CALL THE FIRE DEPARTMENT.
- High winds may knock down power lines or utility poles. Keep people away from the area, and call the fire department. If power lines come in contact with a vehicle, do not touch it or the vehicle. If people are inside, tell them to stay inside. If they try to exit, they may complete a grounded electrical circuit and be instantly killed. They must stay inside until the power is shut by the utility company.
- If a serious electrical malfunction occurs in your home, school or workplace, it is the same as a fire. Notify others, activate the fire alarm and exit promptly. If you are familiar with the operation of a fire extinguisher, remember to use a "Class C" Fire Extinguisher on electrical fires.
- If a person is exposed to an electrical current, call for emergency medical attention.

References: *U.S. Consumer Product Safety Commission, www.cpsc.org; National Fire Protection Association www.nfpa.org; National Electrical Safety Foundation, www.NESF.org; Underwriters Laboratory www.ul.com*